

26 MAY 2005

Brian Tormey, Chief
Energy and Waste Management Bureau
Iowa Department of Natural Resources
Wallace State Office Building
502 East 9th Street
Des Moines, IA 50319



Dear Mr. Tormey:

I am in receipt of your April 29, 2005, letter regarding hazardous waste determinations for electric arc furnace (EAF) steel slag. You requested clarification from the U. S. Environmental Protection Agency (EPA) regarding the reuse of EAF steel slag and how RCRA Subtitle C may apply.

Stephen Hoffman with EPA's Office of Solid Waste and Emergency Response has corresponded with the steel industry and members of your staff on this topic. Region 7 concurs with his conclusions that EAFs that melt more than 50% scrap as input are not able to claim exclusion from hazardous waste regulations through the Bevill exclusion.

The EPA views steel slag as a by-product of the steel making process. As a result, facilities that seek to reuse the slag must examine the applicability of 40 CFR 261.2 to the slag. If the company plans to reuse the slag in some manner where the slag is not placed on the land, such as roof granules or paint additive, then the slag is not a solid waste and therefore not subject to regulation under RCRA.

If the planned use of the slag involves placing it on the ground, such as concrete aggregate, soil amendment, or fill, then it is a solid waste. Generators of solid waste must, according to 40 CFR 262.11, make a hazardous waste determination for each solid waste they generate. The generator must determine if it is a hazardous waste by process knowledge, testing, or identifying it as a listed hazardous waste. It appears EAF steel slag is not listed as a hazardous waste, so that leaves process knowledge and testing. A generator must make a case for process knowledge and none has been effectively made for EAF steel slag. That leaves testing.

In your letter, you enclosed sampling results submitted by IPSCO and Gerdau Ameristeel. Those tests indicate that TCLP levels of hazardous constituents of the slag are below the limit in 40 CFR 261.24 and the slag is not ignitable, reactive, or corrosive. Thus, the slag those tests represent would not be a hazardous waste and it would be subject to IDNR solid waste regulations but not EPA hazardous waste regulations. If the slag failed TCLP testing or it was ignitable, reactive, or corrosive as defined in Part 261, then the slag would be a hazardous waste and the generator would be obligated to dispose of it in accordance with Subtitle C of RCRA.

RESP
BUCKNER
05/ 23 /05

RESP
KOESTERER
05/ /05

RESP
TOENSING
05/ 23 /05

EPA has no blanket determination for EAF steel slag. Each generator, on a case-by-case basis must determine if the EAF steel slag they generate is a hazardous waste, solid waste, or unregulated. Their sampling and testing program should take into account the variability of their process and the need for statistically valid sampling.

If you have any questions about this issue, please contact Ed Buckner of my staff at 913-551-7621 or buckner.edwin@epa.gov.

Sincerely;

Don Toensing
Chief
RCRA Enforcement and State Programs Branch

ARTD/RESP:cas:h:/EBUCKNER/STEELSLAG.WPD/050905



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

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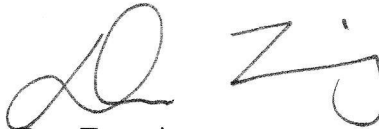
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Sincerely;

A handwritten signature in black ink, appearing to read 'Don Toensing', with a stylized flourish at the end.

Don Toensing
Chief

RCRA Enforcement and State Programs Branch